

SANDY LAKE RESERVOIR DAM AND LOCK
Mississippi River Headwaters Reservoirs
McGregor Vicinity
Aitkin County
Minnesota

HAER No. MN-69

HAER
MINN
1-MCGREGOR
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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
Rocky Mountain Regional Office
Department of the Interior
P.O. Box 25287
Denver, Colorado 80225

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Sandy Lake Reservoir Dam and Lock

I. Introduction

Location: Sandy Lake, McGregor Vicinity, Aitkin County,
Minnesota

QUAD: Libby Quadrangle

UTM: N5181440, E475610

Date of
Construction: 1892-1895, Reconstruction, 1908-1911

Present Owner: St. Paul District, U.S. Army,
Corps of Engineers

Present Use: Flood Control, Recreation, Natural Resources
Management

Significance: The Sandy Lake Reservoir Dam and Lock is one
of six Mississippi River Headwaters dam
sites that are historically significant for
their association with navigation,
commerce, tourism, the Ojibway Indians, and
U.S. Indian policy in Minnesota in the late
19th century.

By providing a consistent flow of water
throughout the navigation season, the
Sandy Lake Dam and Lock enhanced navigation
on and aided the commercial development of
the Upper Mississippi River. The Sandy Lock
enabled the transport of goods and logs via
steamboats between the lumber towns of Grand
Rapids and Brainerd. The dam site was also
one of the earliest non-Indian settlements
in the region and by the late 19th century
was attracting some of the first tourists to
the area. Although Sandy Lake had been a
significant residential site for the Ojibway
Indians since the mid-18th century, most of
the Ojibway left the lake's shores prior
to construction of the project.

Historian: Dr. Jane Lamm Carroll
St. Paul District
U.S. Army, Corps of Engineers

II. HISTORY

The Sandy Lake Dam is located in Aitkin County, Minnesota, on the Sandy River. The dam is one mile above the junction of the Sandy and Mississippi rivers and 270 river miles above St. Paul. The total drainage area above the dam is 421 square miles. Sandy Lake, the most easterly of the six reservoirs, includes eight natural lakes. The Corps considered the Sandy Lake reservoir especially desirable because it was 80 river miles closer to St. Paul than any of the other Mississippi River Headwaters Reservoirs (HAER No. MN-64) dams yet built.¹

The Corps started the original Sandy Lake Dam in 1892 and completed the project in 1895. The first dam was 160 feet long and had five timber sluice gates, one log sluiceway, and one lock chamber. The Corps finished the navigation lock in 1896. In 1908, the Corps reconstructed the dam of concrete and added a new lock between 1909 and 1911. A lock house was built over the lock machinery in 1914.

The present dike is earth-filled, with a timber diaphragm core filled with puddled clay. The original timber pilings support the concrete control structure. There are five four-foot sluiceways with lift gates. The fishway and a log sluiceway are controlled by stop logs. The Sandy Lake Dam supports an eight-foot roadway.²

The navigation lock at Sandy Lake was the only one of its

kind built on the Mississippi River above the Twin Cities. The lock chamber is 30 feet wide and 160 feet long. In 1957, the Corps converted the lock chamber into a spillway containing five sluice bays.

The lock house at Sandy is a small, square metal building resting on a concrete foundation on the wall of the lock. The low-pitched hipped roof is covered with asbestos cement shingles. The original multi-paned sliding windows are intact. The lock operating machinery is also still in place. The lock house is currently used as a local history center, in which photographs and artifacts are displayed.³

The Corps erected eight buildings at the beginning of dam construction in 1892. In addition to a watchman's quarters there was a dining room, kitchen, warehouse, carpenter shop, blacksmith shop, tool house, stable, and laborer's quarters. In 1910, the Corps built a one-story office, which it finished in stucco. A map of the grounds in 1920 shows the dam tender's house, a woodshed, an ice house, a barn, a chicken coop, a warehouse, a carpenter shop, and a blacksmith shop.⁴

The Sandy Lake Dam Site included a one-story dam tender's dwelling finished in stucco that the Corps originally built as a watchman's quarters between 1891 and 1894. The exterior of the house was simple, with plain wooden cornice and window surrounds, a small screened porch, and a gabled roof. The Sandy Lake dam

tender's house was the least architecturally significant of the four Headwaters dam tender's dwellings that remained in 1980. Since that time, the Corps has demolished the house at Sandy Lake. However, the dam tender's house was recorded for the Historic American Buildings Survey (Sandy Lake Dam, Tender's Residence, HABS No. MN-126). The lock house, the lock, and the dam are the only surviving structures at the dam site.

Historical Significance of the Sandy Lake Dam Site

As the fifth in the system of Headwaters dams, the Sandy Lake Dam is significant for its contribution to the enhancement of navigation on the Upper Mississippi River. In addition, the Sandy Lock enabled the transportation of steamboats on the river between the lumber towns of Grand Rapids and Brainerd.

Like the other dams in the system, the Sandy Dam also affected regional commerce. Logging began in the 1860s in the Sandy Lake region. In 1870, Aitkin became the depot for the Northern Pacific Railroad, which carried supplies for the lumber camps. In 1880, the Northern Pacific Railroad also erected a terminal at McGregor to serve the lumber industry. By 1883, at least twelve logging operations were in business in the vicinity of Aitkin. As at the other Headwaters dams, Sandy Lake dam tenders sluiced logs daily.

The Sandy Lake Dam Site remained isolated until after 1900.

Aitkin was located 13 miles downriver and McGregor, located about 10 miles south, was not inhabited permanently until 1889. As at the other dam sites, the Sandy Lake dam tenders and their families were self-sufficient, growing their own vegetables and raising poultry and livestock. As tourism to the Aitkin area grew after 1900, the Sandy Lake Dam Site became a tourist attraction as well.

Sandy Lake had been very important to the Minnesota Ojibway since the 18th century, due to its proximity to the terminus of the Savanna Portage, a main thoroughfare leading from Lake Superior to the Headwaters lakes. Explorers, voyageurs, traders, and Native Americans used the Savanna Portage as an avenue as early as the late 1600s. There is documentation of traders established at Sandy Lake as early as 1784.⁵

By the 1790s, the Hudsons' Bay and Northwest fur trading companies had established trading posts at Sandy Lake. The Northwest post during this period was located about one mile from the dam site on the west shore of the lake, and the Hudson's post was located on the northeastern shore of the lake. In the 1820s, the American Fur Company established a trading post just west of the dam site at the junction of the Sandy and Mississippi rivers.⁶

Sandy Lake was the first locale at which the Ojibway permanently established themselves when the tribe moved from the

north and east into the Mississippi Headwaters region in the mid-18th century.⁷ A census of 1806 shows that 348 Ojibway lived at Sandy Lake. An expedition to the area in the 1820s described Sandy Lake as one of the chief residences of the Ojibway. Lawrence Taliaferro, the United States Indian Agent at Fort Snelling during the 1820s and 1830s, considered Sandy Lake to be one of the two main centers of Ojibway settlement. One indication of the importance of the Sandy Lake settlement was that became the focus of missionary activity. In 1832, the Methodists founded a mission at the village and built a school there the following year. The original mission school and at subsequent school built on the same foundation were located immediately northwest of the dam. The school foundation remains visible today at the dam site. A steamboat landing also existed near the Ojibway village and had been in use for about 20 years when the dam was built.⁸

The main Ojibway village at Sandy Lake was located near the American Fur Company's trading post, not far from the dam.⁹ Although in a treaty of 1867 the Sandy Lake band agreed to move upriver to the reservation at White Oak Point, many decided to remain at the lake. In fact, as late as the 1960s, there were still Ojibway living at the original village site.¹⁰

Numerous graves of the Ojibway and early white settlers are located on a small hill near the former site of the dam tender's

house. Only a few weathered headstones remain. Fourteen formal and informal archeological excavations at the dam site have uncovered evidence of prehistoric habitation as well.¹¹

By the time the Corps started the Sandy Lake Dam, the majority of the Ojibway who had lived at the lake had relocated to White Oak Point or to the White Earth Reservation. The eastern-most Ojibway bands had been the first to suffer the detrimental consequences of dependence on the fur trade when that trade began to decline in the region in the mid-19th century. As early as the 1830s, traders at Sandy were already commenting on the precarious existence of the band, who were virtually totally dependent on traders for daily necessities. The Sandy Ojibway bartered great quantities of wild rice to obtain the goods they needed to survive. Food was often scarce because their hunting grounds were frequently overtaken by their enemy, the Dakota. Often their food stores did not see the band through the winter.¹²

The Ojibway who remained at Sandy Lake after the Corps built the dam must have suffered considerably from the increased overflow, as they were so dependent on the wild rice for food and barter. However, there are no records of the specific damages suffered by the Ojibway at Sandy. The 1985 settlement between the United States and the Ojibway bands included a payment to the so-called "Mississippi" bands, but it only cited damages

resulting from the three northern-most Headwaters dams at
Winnibigoshish, Leech, and Pokegama.

1. See Mississippi River Headwaters Reservoirs, HAER No. MN-64; Carole Zellie, "Upper Mississippi River Headwaters Reservoirs Damsites Cultural Resources Investigation," Report Prepared for the St. Paul District, Corps of Engineers, 1988, p.89.
2. Zellie, p.89.
3. Zellie, p.92.
4. Zellie, p.92.
5. Harold Hickerson, Chippewa Indians in Minnesota II (New York: Garland Publishing, 1974), p.76.
6. Irving Hart, "The Site of the Northwest Company Post on Sandy Lake." Minnesota History (December, 1926), pp.311-325, at p.313; Clifford Greer, Twelve Poses West (McGregor, Minnesota: O.L. Johnson, 1967), p.62.
7. Hickerson, p.86.
8. Zellie, p.97.
9. Hickerson, p.193.
10. Greer, pp.82-83.
11. Zellie, p.97.
12. Hickerson, p.168, pp.184-189.